

TOP SECRET

25X1

AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN
FICEUR

ZEM [REDACTED] CITE NPIC 6762. 25X1
TOP SECRET TTTT [REDACTED]
[REDACTED] ALSO FOR 544 ARTW. 25X1

25X1

1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS, DUAL STELLAR CAMERAS, AND AN INDEX CAMERA.

A. MAIN UNITS

FOCAL LENGTHS (MM)	PAN CAMERAS	PORT HORIZON	STBD HORIZON
FWD 609.638	FWD 55.033	FWD 55.112	
AFT 609.676	AFT 55.125	AFT 55.158	

FILTERS			
PAN	FWD	PRIMARY	W-23A
		ALTERNATE	21
PAN	AFT	PRIMARY	W-21
		ALTERNATE	SF0-5
FWD	STBD	HORIZ	W-25
FWD	PORT	HORIZ	W-25
AFT	STBD	HORIZ	W-25
AFT	PORT	HORIZ	W-25
APERTURE			

STBD HORIZ F/6.3
PORT HORIZ F/6.3
FILM FWD 3404/3401 AFT 3404

DYNAMIC RESOLUTION

FWD	HIGH	CONTRAST	283
FWD	LOW	CONTRAST	198
AFT	HIGH	CONTRAST	226
AFT	LOW	CONTRAST	136

UNIT	NUMBER	FWD	315	AFT	314
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B. DISIC UNIT NO. 11 PORT STELLAR STBD STELLAR

FOCAL LENGTHS(MM)	76.012	76.017
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FILTER (WRATTEN)	NONE	NONE
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EXPOSURE (SEC)	1.5	1.5
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FILM	3401	3401
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3. LENS DISTORTION (PIN CUSHION) (MM)

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

DISTRIBUTION		
CY	OFFICE	PI
1	FILE	
	CABLE SEC.	
	FP&B/RD	
	SECUR.	
3	TSSG/ARSD	
	PSG/OC	
	NRD	
	REPRO	
2	AD	✓
	ISG	
	PRIM	
	SCM	
	SEC	
	SEC	
	SEC	
	TCM	
	IAS	
	DIA-XM	
	SPAD	
	DIA-AP	
	CMR	25X

25X1

TOP SECRET

GROUP 1
Excluded from automatic
downgrading and
declassification

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A. MAIN UNITS

ANGLE OFF AXIS (DEG)	3	2	1	0	359	358	357
FWD	03	02	00	00	00	01	02
AFT	02	01	00	00	00	00	02

B. HORIZON CAMERAS

	FWD	AFT
	PORT	STBD
RADICAL		
10 DEG.	0.01	0.05
20 DEG.	0.04	0.03
TANGENTIAL	0.02	0.03

4. CAMERA ANGLES

A. ANGEL BETWEEN PAN CAMERAS 30 DEG. 35 MIN. 44.68 SEC

B. DEPRESSION ANGLES BETWEEN HORIZON AND PAN CAMERAS

FWD	PORT	15 DEG.	5 MIN	33.00 SEC
FWD	STBD	14 DEG.	43 MIN	31.51 SEC
AFT	PORT	15 DEG.	23 MIN	25.68 SEC
AFT	STBD	13 DEG.	12 MIN	40.68 SEC

C. ANGLES BETWEEN STELLAR AND INDEX CAMERAS

STARBOARD STELLAR AND INDEX 100 DEG 0 MIN 6 SEC

PORT STELLAR AND INDEX 99 DEG 59 MIN 29 SEC

5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA

PASSES	REF LEVEL	AMP LEVEL
1D, 105D, 106D, 108D	6	10
3D THRU 9D, 23D THRU 58D	7	8
16D THRU 22D	7	7
65D THRU 74D	7	9
75D THRU 97D, 120D THRU 122D	7	10
104D	6	9
129D THRU 137D	7	11

FOR ALL PASSES PRIMARY PERIOD 4009 SECONDS, SECONDARY PERIOD 2624, SECONDARY RAMP FACTOR .05240

7. PROGRAM TIME DATA

PASS	DAY	CAMERA ON TIME (ZULU TIME)			PROGRAM ON TIME	
		HR	MIN	SEC	UP RAMP SEC	PROGRAM DURATION SEC
1D	24	02	55	37	1960	26
3D	24	05	50	12	1472	70
4D	24	07	19	21	1517	106
6D	24	10	18	40	1858	81
7D	24	11	49	21	1992	297
8D	24	13	19	41	2103	63
9A1	24	14	22	58	595	26
9A2	24	14	24	57	714	36
9A3	24	14	26	41	818	36
9D	24	14	45	01	1918	189
16D	25	01	00	53	1718	114
18D	25	03	58	42	1703	143
19D	25	05	26	43	1726	152
20D	25	06	55	17	1734	141
22D	25	09	54	32	1879	75
23D	25	11	23	46	1927	185

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24D	25	12	57	35	2248	110
25D	25	14	21	16	1964	213
27D	25	17	25	03	2380	63
28A	25	18	34	41	1252	134
36D	26	06	32	09	1849	97
37D	26	08	03	31	2026	86
38D	26	09	37	56	2388	112
39D	26	10	59	31	1980	142
40D	26	12	32	32	2259	95
41D	26	13	59	26	2168	94
42D	26	15	27	52	2172	94
54D	27	09	12	10	2345	123
55D	27	10	33	59	1954	132
56D	27	12	03	38	2035	70
57D	27	13	29	47	1904	94
58D1	27	15	00	56	2073	76
58D2	27	15	02	43	2181	83
65D	28	01	16	10	1793	69
74A	28	14	16	47	861	40
74D1	28	14	35	33	1988	98
74D2	28	14	41	53	2367	164
75D	28	16	10	00	2347	40
83D	29	03	49	38	1878	63
86D	29	08	18	23	2097	77
87D	29	09	49	25	2257	93
89D1	29	12	42	38	2046	52
89D2	29	12	46	55	2303	82
90A	29	14	01	03	1450	98
90D1	29	14	09	50	1977	117
90D2	29	14	16	55	2402	154
97D	30	00	27	04	1906	87
104D	30	10	54	03	2204	100
105D	30	12	18	40	1973	75
106D	30	13	52	04	2269	75
108D	30	16	36	23	1514	143
120D	31	10	27	26	2092	161
121D	31	11	57	32	2193	63
122D1	31	13	20	02	1839	89
122D2	31	13	26	15	2211	130
129D	31	23	43	24	2121	20
134D1	01	07	01	10	1857	67
134D2	01	07	03	30	1996	137
135D	01	08	36	57	2304	66
137D1	01	11	24	39	1766	63
137D2	01	11	27	59	1965	104
137D	01	11	30	22	2108	136

NOTE: DATA GIVEN IS FOR THE AFT CAMERA ONLY SINCE ALL INDICATIONS AT THIS TIME SHOW THAT FWD CAMERA FAILED ON OR ABOUT PASS ONE.

8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
9	295406.084	51758.5910	-
16	334126.845	4079.3442	.008
25	380327.322	50279.8118	.009
32	419043.780	2596.2617	.008

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41	465257.535	48810.0070	.010
48	503950.806	1103.2696	.008
58	18565.293	52588.6574	.010
64	51967.937	85991.2939	.007
74	103483.398	51106.7433	.012
81	142241.118	3464.4544	.009
90	188410.048	49633.3736	.011
97	227081.646	1904.9625	.009
106	273257.060	48080.3654	.011
113	312020.511	443.8069	.009
122	358198.914	46622.1985	.011
129	396928.936	85352.2108	.010
138	433061.905	45085.1680	.012

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS.

GP-1

T O P S E C R E T

END OF MESSAGE

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